

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



549437



(43) International Publication Date
30 September 2004 (30.09.2004)

PCT

(10) International Publication Number
WO 2004/082528 A2

(51) International Patent Classification⁷: A61F

(21) International Application Number: PCT/US2004/008176

(22) International Filing Date: 17 March 2004 (17.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/455,241 17 March 2003 (17.03.2003) US
60/491,490 31 July 2003 (31.07.2003) US

(71) Applicant (for all designated States except US): COOK INCORPORATED [US/US]; 925 South Curry Pike, P.O. Box 489, Bloomington, IN 47402 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): OSBORNE, Thomas, A. [US/US]; 9480 S. Pointe LaSalles Drive, Bloomington, IN 47401 (US). CASE, Brian, C. [US/US]; 841 Rosewood Drive, Bloomington, IN 47404 (US). LESSARD, David, R. [US/US]; 4302 Chadwick Drive, Bloomington, IN 47401 (US). FEARNOT, Neal, E. [US/US]; 3051 Hamilton Street, West Lafayette, IN 47906 (US).

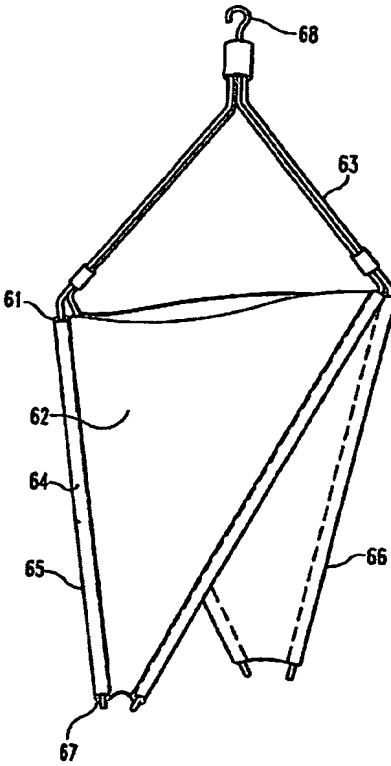
(74) Agents: GANDY, Kenneth, A. et al.; Woodard, Erhardt, Moriarty, McNett & Henry LLP, Bank One Center/Tower, Suite 3700, 111 Monument Circle, Indianapolis, IN 46204 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

{Continued on next page}

(54) Title: VASCULAR VALVE WITH REMOVABLE SUPPORT COMPONENT

(57) Abstract: Described are vascular valve devices having valve elements formed of flexible material and at least one removable frame element. Also described are methods for using such devices in the vascular system and in particular in the venous system to treat venous insufficiency.



WO 2004/082528 A2

BEST AVAILABLE COPY